

PROJECT TITLE : TOBACCO ANALYSIS  
PERIOD COVERED : February 1st - February 28th 1980  
WRITTEN BY : L. JOSEPH

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TOBACCO LOT ANALYSIS

1. Special trials

1.1. Low nitrate samples (cultivation trial of Burley) (1)

The NO<sub>3</sub>-N, TA, RS and NH<sub>3</sub>-N analyses of the 140 samples are under way.

1.2. Pakistani tobacco (2)

The analyses of the 33 samples are under way.

1.3. Partially contaminated lot (No 9084) (3)

The cigarettes are available, but the smoke analyses have not yet been done.

2. Routine tobacco analyses

Introduction of inputs on EDP

Only four lots of stems.  
No smoke analysis was made this month.

Lots under evaluation

About forty lots.

Lots available, but not yet analysed

Sixteen lots.

ASSISTANCE TO OTHER PROJECTS

1. Spotless

Services were given to Mr. Moser for this project. We have received five samples of raw blend tobacco (4).

2. RCB Monique

Trial Nino No 4

Special cigarettes were made with rod tobacco, the filter was adjusted with tape.  
The analyses are under way.

Trial Nino No 5

We have not yet received the smoke analyses.

MISCELLEANEOUS

TLA was made on a sample obtained by mixing five different lots of reconstituted tobacco. The analysis result corresponds to the weighted average obtained with the individual TLA results (table annexed).



L. Joseph

REFERENCES

- (1) Monthly report of April 1979
- (2) Letter from Mr. C. Jeanneret to Miss L. Joseph, dated February 1, 1980
- (3) Letter from Mr. E. Lecoultrre to Miss L. Joseph, dated December 17, 1979
- (4) Monthly report Spotless, January 1980

Table 1

# RECONSTITUTED BLEND TOBACCOS

## 1. FILLER ANALYSES

		Lot 0108	Lot 0106	Lot 7067	Lot 7007	Lot 9185	Calcu- lated blend	Analysed blend
TA	%	0.47	0.47	0.43	0.44	0.91	0.54	0.57
RS	%	2.1	1.7	6.4	5.7	3.6	3.9	4.0
NO <sub>3</sub> -N	%	0.19	0.17	0.15	0.16	0.46	0.23	0.22
NH <sub>3</sub> -N	%	1.80	1.94	0.72	0.12	0.11	0.94	0.86
Chloride	%	0.69	0.76	1.02	1.06	1.42	0.99	1.02
Ashes	%	23.6	24.9	22.6	20.3	17.9	21.9	20.9
K <sup>+</sup>	%	5.28	4.76	4.49	4.42	5.84	4.96	5.22
Ca <sup>2+</sup>	%	2.18	2.39	5.01	4.44	2.13	3.23	3.24
Mg <sup>2+</sup>	%	0.45	0.42	0.50	0.47	0.60	0.49	0.49
Eq. moist.	%	14.5	13.2	10.3	10.1	13.7	12.2	12.8
F. P. at eq. moist.	ml/10 g	21.8	24.4	31.4	32.3	30.2	28.0	29.2

## 2. SMOKE ANALYSES

### 2.1 Cigarette

Tobacco weight	mg	1263	1135	1058	1017	1166	1128	1156
Moisture	%	15.1	15.6	11.6	11.7	14.9	13.8	13.5
RTD	mm H <sub>2</sub> O	104	100	123	135	160	124	134
Compressibility	mm	4.73	4.90	3.18	3.93	2.71	3.89	3.40

### 2.2 Filter

Smoke nicotine	mg/g	0.63	0.75	0.36	0.31	0.60	0.53	0.54
HCN	g/g	172	161	17	16	23	78	47
Aldehydes	mg/g	0.62	0.51	0.67	0.55	0.37	0.54	0.54

		Lot 0108	Lot 0106	Lot 7067	Lot 7007	Lot 9185	Calcu- lated blend	Analysed blend
2.3 <u>Smoke</u>								
CO	mg/g	20.2	17.7*	18.8	23.6	22.4	20.5	21.5
NO	mg/g	0.42	0.42*	0.15	0.19	0.53	0.34	0.33
DPM	mg/g	19.8	20.1	10.5	10.6	11.0	14.4	14.0
SN	mg/g	0.68	0.79	0.39	0.42	0.75	0.61	0.64
Puff number	nbr/g	13.5	19.1	9.2	9.3	9.8	12.2	10.3
HCN	g/g	560	816	130	145	216	374	303
Aldehydes	mg/g	0.93	0.91	1.55	1.70	1.45	1.31	1.48

\* These results were not obtained from this lot (bad combustion), but are an average of results obtained on similar lots.